

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Currently Amended) A method for regulating access to data in at least one data storage device ~~(13; 43)~~ in a system ~~(9)~~ comprising a plurality of individual systems ~~(10-12)~~, in which the individual systems ~~(10-12)~~ reserve themselves free data areas or address areas in the data storage device ~~(13; 43)~~ and the reserved areas are then blocked for access by other individual systems ~~(10-12)~~, with areas ~~(20, 23; 48)~~ which are speculatively extended by expansion areas ~~(19, 19')~~ in comparison with the directly required areas ~~(18, 21; 49)~~ being reserved.

2. (Currently Amended) The method as claimed in claim 1, wherein ~~characterized in that~~ the individual systems identify a directly required area from at least one address statement ~~(51)~~.

3. (Currently Amended) The method as claimed in claim 1, wherein ~~characterized in that~~ at least part of the data storage device ~~(13; 43)~~ is provided as a communication device for the individual systems ~~(10-12)~~.

4. (Currently Amended) The method as claimed in claim 1, wherein ~~characterized in that~~ at least two individual systems ~~(10, 11)~~ use a common area ~~(22)~~ of the data storage device ~~(13; 43)~~.

5. (Currently Amended) The method as claimed in claim 1, wherein ~~characterized in that~~ the system comprising a plurality of individual systems ~~(10-12)~~ is a distributed

system.

6. (Currently Amended) The method as claimed in claim 1, ~~wherein characterized in that~~ at least part of a respective reserved expansion area ~~(19, 19')~~ going beyond the directly required area ~~(18)~~ is released upon a reservation request ~~(50)~~ relating to at least part of the reserved expansion area ~~(19, 19')~~ from another individual system ~~(10-12)~~ or from a data storage device ~~(13; 43)~~.

7. (Currently Amended) The method as claimed in claim 1, ~~wherein characterized in that~~ the expansion area ~~(19, 19')~~ is released upon a reservation request ~~(50)~~ coming from another individual system ~~(10-12)~~ if said expansion area is requested as a directly required area ~~(21)~~ by this other individual system.

8. (Currently Amended) The method as claimed in claim 7, ~~wherein characterized in that~~ the expansion area ~~(19, 19')~~ is also released upon a reservation request ~~(50)~~ coming from another individual system ~~(10-12)~~ if said expansion area is requested as an expansion area ~~(22)~~ by this other individual system.

9. (Currently Amended) The method as claimed in claim 7, ~~wherein characterized in that~~ only a particular part of the expansion area is released upon a reservation request ~~(50)~~ coming from another individual system ~~(10-12)~~ if said expansion area likewise relates only to the expansion area ~~(22)~~ in the case of this other individual system.

10. (Currently Amended) The method as claimed in claim 1, ~~wherein characterized in that~~ the individual systems ~~(10-12)~~ are ~~databases and/or operating systems and/or individual~~ modules.

11. (Currently Amended) The method as claimed in claim 1, ~~wherein~~ characterized in that the individual systems ~~(10-12)~~ and the at least one data storage device ~~(13, 43)~~ are decoupled from one another by means of buffer cache units ~~(14-17)~~.

12. (Currently Amended) The method as claimed in claim 1, ~~wherein~~ characterized in that the release of the directly required area ~~(18)~~ upon a reservation request ~~(50)~~ coming from another individual system ~~(10-12)~~ is dependent on the urgency of the respective reservation.

13. (Currently Amended) The method as claimed in claim 1, ~~wherein~~ characterized in that reservations relate to the read and/or write access.

14. (Currently Amended) A data storage device for regulating access to data in a system ~~(40, 9)~~ comprising a plurality of individual systems ~~(10-12)~~, particularly individual modules, having reservation means ~~(46)~~ for reserving free data areas or address areas ~~(48, 49)~~ in the data storage device ~~(13, 43)~~ using reservation requests ~~(50)~~ from the individual systems ~~(10-12)~~, where the reservation means ~~(46)~~ block the reserved areas for access by other individual systems ~~(10-12)~~, and where the reservation means ~~(46)~~ are designed to reserve areas ~~(20, 23, 48)~~ which are speculatively extended in comparison with the directly required areas ~~(18, 21)~~.

15. (Currently Amended) The data storage device as claimed in claim 14, ~~wherein~~ characterized in that the reservation means ~~(46)~~ are designed to ascertain an area which is directly required by an individual system by evaluating at least one address statement ~~(51)~~ which is contained in a reservation request ~~(50)~~ requesting the area.

16. (Currently Amended) The data storage device as claimed in claim 14, ~~wherein~~characterized in that upon a competing reservation request ~~(50)~~ from a second individual system ~~(11)~~ the reservation means ~~(46)~~ reserve at least part of a speculatively extended area ~~(20, 23, 48)~~ which is reserved for a first individual system ~~(10)~~ for the second individual system.

17. (Currently Amended) An individual system, particularly an individual module, for cooperation with a data storage device ~~(13, 43)~~ as claimed in claim 14 for regulating access to data in a system comprising a plurality of individual systems ~~(10-12)~~, having requesting means ~~(44)~~ for reserving free data areas or address areas in the data storage device ~~(13, 43)~~ using reservation requests ~~(50)~~, where the data storage device ~~(13, 43)~~ blocks the reserved areas for access by other individual systems ~~(10-12)~~, and where the requesting means ~~(44)~~ are designed to reserve areas ~~(20, 23, 48)~~ which are speculatively extended in comparison with the directly required areas ~~(18, 21, 49)~~.

18. (Currently Amended) The individual system, particularly an individual module, as claimed in claim 17, ~~wherein~~characterized in that the requesting means ~~(44)~~ are designed to send at least one address statement ~~(51)~~ for identifying at least one directly required area in a reservation request ~~(50)~~ requesting the area in the data storage device ~~(13, 43)~~.

19. (Currently Amended) The individual system, particularly an individual module, as claimed in claim 17, ~~further comprising~~characterized in that it has communication means for communicating with at least one further individual system about a common area ~~(18, 21, 49)~~ which is at least intermittently reserved in the data storage device ~~(13, 43)~~, where the individual systems respectively identify the common

memory area from at least one address statement~~-(51)~~.

20. (Currently Amended) The data storage device as claimed in claim 14, ~~wherein~~~~characterized in that~~ it contains program code which can be executed by a processor ~~(30)~~ in a computer~~-(40)~~.

21. (Currently Amended) A message for communication between a data storage device as claimed in claim 14, ~~wherein~~~~characterized in that~~ it contains a reservation request ~~(50)~~ or a reservation confirmation for at least one speculatively extended area~~-(20, 23, 48)~~.

22. (Currently Amended) A storage medium having a data storage device ~~(13, 43)~~ and/or an individual system, particularly an individual module, as claimed in claim 20.

23. (New) A method for regulating access to data in at least one data storage device in a system comprising a plurality of individual systems, comprising the steps of:

the individual systems each respectively reserving a free data or address area in the data storage device, thereby establishing a reserved area;

the respective reserved area being blocked from access by other individual systems;

speculative extension of each said reserved area by an expansion area associated with the respective reserved area, reserving said expansion area for access by said respective individual system.

24. (New) The method of claim 23, further comprising the step of blocking access to said expansion area by an individual system other than said respective individual system.

25. (New) The method of claim 23, further comprising the step of releasing the expansion area upon a reservation request by an individual system other than the respective individual system.